NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Earth Science The Sun (Chapter 29 Outline)**

***AS YOU READ, RESPOND TO THE FOLLOWING:***

*Vocabulary*: **Define in your own words**

Nuclear fusion-

radiative zone-

convective zone-

Neutrino-

Positron-

Sunspot-

Prominence-

Coronal Mass ejection-

Aurora-

*Respond to the following:*

Explain how the process of nuclear fusion works inside the sun. (2 pts)

What is meant by the equation E = mc^2? Explain what each variable means. (3 pts)

Describe each layer of the of the sun in detail. Include a discussion on temperature and unique characteristics of each layer. (6 pts)

Explain how sunspots are related to powerful magnetic fields on the sun. (2 pts)

Describe how the solar wind can cause auroras on Earth. (2 pts)

***ABOUT THE READING:***

Write three things that you learned about the Sun*:*

***Make sure to write a full sentence.***

*Example: I learned that the speed of light travels at about 300,000,000 meters per second.*

*1.*

*2.*

*3.*

***Assigned work****: Write a short paragraph that explains how our sun is different than that of others. Is our sun a special star? Or is a regular star...Explain the unique characteristics of our sun in a short paragraph. (8 pts)*